



BRUHAT BANGALORE MAHANAGARA PALIKE

KODIGEHALLI SUBDIVISION

WARD NO.07, Byatarayanapura

MEASUREMENT

Name of work: Improvements to drains of Kuvempu layout main road to Elumandamma temple road in ward No.07, Byatarayanapura.

Est Cost : 30.00 LAKHS

BRUHAT BANGALORE MAHANAGARA PALIKE								
KODIGEHALI SUB DIVISION- WARD 7 BYATARAYANAPURA								
Agency		M/S KRIDL						
Name of work:- Improvements to drains of Kuvempu layout main road to Elumandamma temple road in ward No.07, Byatarayanapura.								
SI NO	Description of work	No	L	B	D	QTY		
1	Removing and refixing stone slabs of drains and pointing in CM							
	0-33	1	25	0.9		22.5		
	36.5-52	1	10	0.9		9		
	55.8-73.8	1	18	0.9		16.2		
	76.3-106.3	1	25	0.9		22.5		
	106-129.5	1	15	0.9		13.5		
	136-166	1	25	0.9		22.5		
	166-179.50	1	10	0.9		9		
	184.55-214.5	1	25	0.9		22.5		
	214.5-244.50	1	25	0.9		22.5		
	244.50-268.50	1	15	0.9		13.5		
	273.8-298.80	1	25	0.9		22.5		
	304.5-334.50	1	15	0.9		13.5		
	334.50-364.50	1	15	0.9		13.5		
	364.50-372.50	1	8	0.9		7.2		
	372.50-404.50	1	15	0.9		13.5		
	Corporation bank side							
	0-30	1	20	0.9		18		
	30-60	1	18	0.9		16.2		
	60-90	1	25	0.9		22.5		
	90-120	1	20	0.9		18		
	120-150	1	15	0.9		13.5		
	150-180	1	30	0.9		27		
	180-204	1	24	0.9		21.6		
						380.7		
				sqm	Ltd	380.25		
2	Earthwork excavation by manual means in rodinary soil involving an average horizontal throw upto 2 m and an average lift upto 1.5m, excavated surafce levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking clods complete as per specifications							
	0-33	1	33	0.9	0.90	26.73		
	36.5-52	1	15.5	0.9	0.90	12.555		
	55.8-73.8	1	18	0.9	0.90	14.58		
	76.3-106.3	1	30	0.9	0.90	24.3		

Asphy. N.D
AE(134)

78.15

Assistant Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara Palike
Bangalore - 560 092
N.D
2014

106-129.5	1	23.5	0.9	0.90	19.035
136-166	1	30	0.9	0.90	24.3
166-179.50	1	13.5	0.9	0.90	10.935
184.55-214.5	1	30	0.9	0.90	24.3
214.5-244.50	1	30	0.9	0.90	24.3
244.50-268.50	1	24	0.9	0.90	19.44
273.8-298.80	1	25	0.9	0.90	20.25
304.5-334.50	1	30	0.9	0.90	24.3
334.50-364.50	1	30	0.9	0.90	24.3
364.50-372.50	1	8	0.9	0.90	6.48
372.50-404.50	1	32	0.9	0.90	25.92
					301.725
Corporation bank side					
0-30	1	30	0.9	0.9	24.3
30-60	1	30	0.9	0.9	24.3
60-90	1	30	0.9	0.9	24.3
90-120	1	30	0.9	0.9	24.3
120-150	1	30	0.9	0.9	24.3
150-180	1	30	0.9	0.9	24.3
180-204	1	24	0.9	0.9	19.44
					165.24
culverts					
	1	3.6	0.9	0.9	2.916
	1	3.8	0.9	0.9	3.078
	1	2.5	0.9	0.9	2.025
	1	6.6	0.9	0.9	5.346
	1	7.4	0.9	0.9	5.994
	1	5.7	0.9	0.9	4.617
	1	5.3	0.9	0.9	4.293
	1	5.7	0.9	0.9	4.617
					32.886
Patch work	1	2	0.3	0.45	0.27
Kuvempu layout	1	2	0.45	0.45	0.405
	5	4.85	2	0.45	21.825
					22.5
Desitling of drain Vinayaka layout 2nd stage					
1st cross	2	108	0.45	0.5	48.6
2nd cross	2	105	0.45	0.5	47.25
3rd cross	2	105	0.45	0.5	47.25
4th cross	2	100	0.45	0.5	45
main road	2	100	0.45	0.5	45
Coffe board layout					
5th cross	3*2	30	0.45	0.5	40.5
	1*2	20	0.45	0.5	9
cross road	3*2	30	0.45	0.5	40.5

1st/14 N-D
4E(124)

323.10

78.16

CE 523.10

		1*2	15	0.45	0.5	6.75		
	13th main road	13*2	30	0.5	0.6	234		
		1*2	10	0.45	0.5	4.5		
						568.35		
				Grand total- cum		1090.70		
				Qty Ltd to		1077.30		
3	Providing and laying in position plain cement concrete of nominal mix 1:4:8 using 40mm and down size graded granite metal machine mixed, concrete laid in layers not exceeding 15 cms. Thick well compacted in foundation and plinth, including cost of all materials labour, HOM of machinery, curing complete as per specification						NDP AE (13A) 30/4/15	Assistant Executive Engineer Kodigehalli Sub Bruhat Bangalore Mah Bangalore
	RCC DRAIN bottom							
	0-33	1	33	0.9	0.15	4.455		
	36.5-52	1	15.5	0.9	0.15	2.0925		
	55.8-73.8	1	18	0.9	0.15	2.43		
	76.3-106.3	1	30	0.9	0.15	4.05		
	106-129.5	1	23.5	0.9	0.15	3.1725		
	136-166	1	30	0.9	0.15	4.05		
	166-179.50	1	13.5	0.9	0.15	1.8225		
	184.55-214.5	1	30	0.9	0.15	4.05		
	214.5-244.50	1	30	0.9	0.15	4.05		
	244.50-268.50	1	24	0.9	0.15	3.24		
	273.8-298.80	1	25	0.9	0.15	3.375		
	304.5-334.50	1	30	0.9	0.15	4.05		
	334.50-364.50	1	30	0.9	0.15	4.05		
	364.50-372.50	1	8	0.9	0.15	1.08		
	372.50-404.50	1	32	0.9	0.15	4.32		
						50.29		
	Corporation bank side							
	0-30	1	30	0.9	0.15	4.05		
	30-60	1	30	0.9	0.15	4.05		
	60-90	1	30	0.9	0.15	4.05		
	90-120	1	30	0.9	0.15	4.05		
	120-150	1	30	0.9	0.15	4.05		
	150-180	1	30	0.9	0.15	4.05		
	180-204	1	24	0.9	0.15	3.24		
						27.54		
	Ramps for drains							
		1	30	0.3	0.15	1.35		
		1	13.5	0.3	0.15	0.61		
		1	16.5	0.3	0.15	0.74		
		1	29	0.3	0.15	1.31		
		1	22	0.3	0.15	0.99		
		1	29	0.3	0.15	1.31		
		1	12.5	0.3	0.15	0.56		

Assistant Executive Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara Palika
Bangalore - 560 092

Assistant Executive Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara Palika
Bangalore - 560 092

13th main road
AE(13A)

6.87

Qr 6.87

	1	28	0.3	0.15	1.26	
	1	28	0.3	0.15	1.26	
	1	22	0.3	0.15	0.99	
	1	22	0.3	0.15	0.99	
	1	29	0.3	0.15	1.31	
	1	28	0.3	0.15	1.26	
	1	6	0.3	0.15	0.27	
	1	30	0.3	0.15	1.35	
					15.55	
	1	28	0.3	0.15	1.26	
	1	29	0.3	0.15	1.305	
	1	28	0.3	0.15	1.26	
	1	29	0.3	0.15	1.305	
	1	29	0.3	0.15	1.305	
	1	29	0.3	0.15	1.305	
	1	23	0.3	0.15	1.035	
					8.775	
culverts	1	3.6	0.9	0.15	0.49	
	1	3.8	0.9	0.15	0.51	
	1	2.5	0.9	0.15	0.34	
	1	6.6	0.9	0.15	0.89	
	1	7.4	0.9	0.15	1.00	
	1	5.7	0.9	0.15	0.77	
	1	5.3	0.9	0.15	0.72	
	1	5.7	0.9	0.15	0.77	
					5.48	
Ramps for culverts	2	3.6	0.45	0.15	0.49	
	2	3.8	0.45	0.15	0.51	
	2	2.5	0.45	0.15	0.34	
	2	6.6	0.45	0.15	0.89	
	2	7.4	0.45	0.15	1.00	
	2	5.7	0.45	0.15	0.77	
	2	5.3	0.45	0.15	0.72	
	2	5.7	0.45	0.15	0.77	
					5.48	
					113.11	
Patch work	1	2	0.30	0.15	0.09	
Kuvempu layout	1	2	0.45	0.15	0.14	
	5	4.85	2.00	0.15	7.28	
					7.50	
				cum	120.60	

Qr 6.87
11/7/19

11/7/19

10/11/14 ND
AE(124)

NDP
AE(124)
8/5

5

Providing TMT Steel Reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications

			L	no of rods	le of u bar	Total length	
						10mm	8mm
Main rod	0-33	1	33	375	2.15	806.25	
distribution		1	33	7	33		231
	36.5-52	1	15.5	190	2.15	408.5	
		1	15.5	7	15.5		108.5
	55.8-73.8	1	18	215	2.15	462.25	
		1	18	7	18		126
	76.3-106.3	1	30	365	2.15	784.75	
		1	30	7	30		210
	106-129.5	1	23.5	290	2.15	623.5	
		1	23.5	7	23.5		164.5
	136-166	1	30	365	2.15	784.75	
		1	30	7	30		210
	166-179.50	1	13.5	170	2.15	365.5	
		1	13.5	7	13.5		94.5
	184.55-214.5	1	30	365	2.15	784.75	
		1	30	7	30		210
	214.5-244.50	1	30	365	2.15	784.75	
		1	30	7	30		210
	244.50-268.50	1	24	285	2.15	612.75	
		1	24	7	24		168
	273.8-298.80	1	25	290	2.15	623.5	
		1	25	7	25		175
	304.5-334.50	1	30	365	2.15	784.75	
		1	30	7	30		210

10thly .ND
45 (47)

	334.50-364.50	1	30	365	2.15	784.75	
		1	30	7	30		210
	364.50-372.50	1	8	95	2.15	204.25	
		1	8	7	8		56
	372.50-404.50	1	32	365	2.15	784.75	
		1	32	7	32		224
Corporation bank side							
	0-30	1	32	365	2.2	803	
		1	32	7	32		224
	30-60	1	32	365	2.2	803	
		1	32	7	32		224
	60-90	1	32	365	2.2	803	
		1	32	7	32		224
	90-120	1	32	365	2.2	803	
		1	32	7	32		224
	120-150	1	32	370	2.2	814	
		1	32	7	32		224
	150-180	1	32	370	2.2	814	
		1	32	7	32		224
	180-204	1	32	370	2.2	814	
		1	32	7	32		224
						15253.75	4175.5
						0.62 kg/cum	0.39kg/cum
						9457.325	1628.445
						11085.77	
16mm 12mm							
Le of culverts	No	Le of U bar	Total	Le	Total		
3.6	24	2.0	48.0	4	3.6	14.4	
3.8	25	2.0	50.0	4	3.8	15.2	
2.5	16	2.0	32.0	4	2.5	10	
6.6	44	2.0	88.0	4	6.6	26.4	
7.4	50	2.0	100.0	4	7.4	29.6	
5.7	38	2.0	76.0	4	5.7	22.8	
5.3	35	2.0	70.0	4	5.3	21.2	
5.7	38	2.0	76.0	4	5.7	22.8	
			415.0			162.4	
			at 1.2 Kg/cum		at 0.89 kg/cum		
			498		144.536	642.536	11.72831
			Qty Ltd to		tonne	11728.31	11.73

Assistant Engineer
 Kodiyahalli
 Bruhat Bangalore Mahanagara Palike
 Bangalore

6	Providing and removing Centering, shuttering, strutting, propping etc., for columns, pillars, piers, abutments, post and struts, square / rectangular slabs / side walls polygon in plan including cost of materials, labour complete as per specification and directions of the Engineer in charge						
	0-33	4	33	0.7	92.40		
	36.5-52	4	15.5	0.7	43.40		
	55.8-73.8	4	18	0.7	50.40		
	76.3-106.3	4	30	0.7	84.00		
	106-129.5	4	23.5	0.7	65.80		
	136-166	4	30	0.7	84.00		
	166-179.50	4	13.5	0.7	37.80		
	184.55-214.5	4	30	0.7	84.00		
	214.5-244.50	4	30	0.7	84.00		
	244.50-268.50	4	24	0.7	67.20		
	273.8-298.80	4	25	0.7	70.00		
	304.5-334.50	4	30	0.7	84.00		
	334.50-364.50	4	30	0.7	84.00		
	364.50-372.50	4	8	0.7	22.40		
	372.50-404.50	4	32	0.7	89.60		
	Corporation bank side						
	0-30	4	30	0.7	84.00		
	30-60	4	30	0.7	84.00		
	60-90	4	30	0.7	84.00		
	90-120	4	30	0.7	84.00		
	120-150	4	30	0.7	84.00		
	150-180	4	30	0.7	84.00		
	180-204	4	24	0.7	67.20		
					1614.20		
	culverts						
		4	3.6	0.7	10.08		
		4	3.8	0.7	10.64		
		4	2.5	0.7	7.00		
		4	6.6	0.7	18.48		
		4	7.4	0.7	20.72		
		4	5.7	0.7	15.96		
		4	5.3	0.7	14.84		
		4	5.7	0.7	15.96		
					113.68		
				Sqm	1727.88		
				Qty Ltd to	1632.00		

Antilly N.D
AE(13/5)

NDP
AE(13/5)
13/5

Brundage Bangalore - 560 092

Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320 Kgs with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum with superplastizers @ 3lts conforming to IS 9103-1999 RE affirmed - 2008 machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, stair case lintels, retaining walls return walls, walls(anythickness) including attached plasters columns piers abutments pillars posts struts

RCC Drain -bottom

0-33	1	33	0.9	0.15	4.46
36.5-52	1	15.5	0.9	0.15	2.09
55.8-73.8	1	18	0.9	0.15	2.43
76.3-106.3	1	30	0.9	0.15	4.05
106-129.5	1	23.5	0.9	0.15	3.17
136-166	1	30	0.9	0.15	4.05
166-179.50	1	13.5	0.9	0.15	1.82
184.55-214.5	1	30	0.9	0.15	4.05
214.5-244.50	1	30	0.9	0.15	4.05
244.50-268.50	1	24	0.9	0.15	3.24
273.8-298.80	1	25	0.9	0.15	3.38
304.5-334.50	1	30	0.9	0.15	4.05
334.50-364.50	1	30	0.9	0.15	4.05
364.50-372.50	1	8	0.9	0.15	1.08
372.50-404.50	1	32	0.9	0.15	4.32

Corporation
bank side

0-30	1	30	0.9	0.15	4.05
30-60	1	30	0.9	0.15	4.05
60-90	1	30	0.9	0.15	4.05
90-120	1	30	0.9	0.15	4.05
120-150	1	30	0.9	0.15	4.05
150-180	1	30	0.9	0.15	4.05
180-204	1	24	0.9	0.15	3.24

77.83

culverts

	1	3.6	0.9	0.15	0.49
	1	3.8	0.9	0.15	0.51
	1	2.5	0.9	0.15	0.34
	1	6.6	0.9	0.15	0.89
	1	7.4	0.9	0.15	1.00
	1	5.7	0.9	0.15	0.77
	1	5.3	0.9	0.15	0.72
	1	5.7	0.9	0.15	0.77

5.48

Sidewall

	2	33	0.15	0.7	6.93
	2	15.5	0.15	0.7	3.26

Not by ND
AE (W)

10.19

NDD
DE (W)
2/12

cert
1/13/5/15

Ch- 10.19

	2	18	0.15	0.7	3.78	
	2	30	0.15	0.7	6.30	
	2	23.5	0.15	0.7	4.94	
	2	30	0.15	0.7	6.30	
	2	13.5	0.15	0.7	2.84	
	2	30	0.15	0.7	6.30	
	2	30	0.15	0.7	6.30	
	2	24	0.15	0.7	5.04	
	2	25	0.15	0.7	5.25	
	2	30	0.15	0.7	6.30	
	2	30	0.15	0.7	6.30	
	2	8	0.15	0.7	1.68	
	2	32	0.15	0.7	6.72	
	2	30	0.15	0.7	6.30	
	2	30	0.15	0.7	6.30	
	2	30	0.15	0.7	6.30	
	2	30	0.15	0.7	6.30	
	2	30	0.15	0.7	6.30	
	2	30	0.15	0.7	6.30	
	2	24	0.15	0.7	5.04	
	2	3.6	0.15	0.7	0.76	
	2	3.8	0.15	0.7	0.80	
	2	2.5	0.15	0.7	0.53	
	2	6.6	0.15	0.7	1.39	
	2	7.4	0.15	0.7	1.55	
	2	5.7	0.15	0.7	1.20	
	2	5.3	0.15	0.7	1.11	
	2	5.7	0.15	0.7	1.20	
					129.59	
					212.90	
Patch work	1	2	0.3	0.1	0.06	
Kuvempu layout	1	2	0.45	0.1	0.09	
	5	4.85	2	0.1	4.85	
					5.00	
					217.90	
					214.20	
Qty Ltd to					214.20	
Providing granite slabs of selected quality roughly dressed and						
8 fixed in cement mortar (1:6) including fixing curing etc.,						
0-33	8	0.6	0.9		4.32	
36.5-52	5.5	0.6	1.2		3.96	
55.8-73.8	0	0.6	1.2		0.00	
76.3-106.3	5	0.6	1.2		3.60	
106-129.5	8.5	0.6	1.2		6.12	

As per N.D.
A.F. (27)

18.00

Ch- 10.19
23/8/15

NDD
DE (27)
23/8

136-166	5	0.6	1.2		3.60		
166-179.50	3.5	0.6	1.2		2.52		
184.55-214.5	5	0.6	1.2		3.60		
214.5-244.50	5	0.6	1.2		3.60		
244.50-268.50	9	0.6	1.2		6.48		
273.8-298.80	0	0.6	1.2		0.00		
304.5-334.50	15	0.6	1.2		10.80		
334.50-364.50	15	0.6	1.2		10.80		
364.50-372.50	0	0.6	1.2		0.00		
372.50-404.50	17	0.6	1.2		12.24		
Corporation bank side							
0-30	12	0.6	0.9		6.48		
30-60	5	0.6	1.2		3.60		
60-90	10	0.6	1.2		7.20		
90-120	15	0.6	1.2		10.80		
120-150	0	0.6	1.2		0.00		
150-180	6	0.6	1.2		4.32		
180-204	24	0.6	1.2		17.28		
					121.32		
Missing qty	21	0.6	1.2		15.12		
	28	0.6	1.2		20.16		
	22	0.6	1.2		15.84		
	20	0.6	1.2		14.40		
	25	0.6	1.2		18.00		
					83.52		
				Sqm	204.75		
Providing one line dressing to granite stone/slabs as per 9 specifications.							
0-33	35	0.6	0.9		18.90		
36.5-52	12	0.6	1.2		8.64		
55.8-73.8	10	0.6	1.2		7.20		
76.3-106.3	30	0.6	1.2		21.60		
106-129.5	12	0.6	1.2		8.64		
136-166	40	0.6	1.2		28.80		
166-179.50	12	0.6	1.2		8.64		
184.55-214.5	30	0.6	1.2		21.60		
214.5-244.50	30	0.6	1.2		21.60		
244.50-268.50	30	0.6	1.2		21.60		
273.8-298.80	30	0.6	1.2		21.60		
304.5-334.50	15	0.6	1.2		10.80		
334.50-364.50	15	0.6	1.2		10.80		
364.50-372.50	3	0.6	1.2		2.16		
372.50-404.50	40	0.6	1.2		28.80		
Corporation bank side							
0-30	38	0.6	1.2		27.36		

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30-60	38	0.6	1.2		27.36		
60-90	39	0.6	1.2		28.08		
90-120	28	0.6	1.2		20.16		
120-150	30	0.6	1.2		21.60		
150-180	30	0.6	1.2		21.60		
180-204	20	0.6	1.2		14.40		
					401.94		
			Sqm	Ltd to	306.00		

7 Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240 kgs, with 20 mm and down size graded granite matel coarse aggregates @ 0.69 cum and fine aggragtes @ 0.459cum, machine mixed concrete laid in layers not eceeding 15 cms, thick well compacted, in foundation, plinth and cills including cost of all materials, labour HOM machinery curing complate as per specifications

0-33	1	32	0.3	0.12	1.15		
36.5-52	1	15	0.3	0.12	0.54		
55.8-73.8	1	17	0.3	0.12	0.61		
76.3-106.3	1	28	0.3	0.12	1.01		
106-129.5	1	22	0.3	0.12	0.79		
136-166	1	28	0.3	0.12	1.01		
166-179.50	1	12	0.3	0.12	0.43		
184.55-214.5	1	28	0.3	0.12	1.01		
214.5-244.50	1	28	0.3	0.12	1.01		
244.50-268.50	1	22	0.3	0.12	0.79		
273.8-298.80	1	22	0.3	0.12	0.79		
304.5-334.50	1	28	0.3	0.12	1.01		
334.50-364.50	1	28	0.3	0.12	1.01		
364.50-372.50	1	8	0.3	0.12	0.29		
372.50-404.50	1	30	0.3	0.12	1.08		

Corporation bank side							
0-30	1	28	0.3	0.12	1.01		
30-60	1	28	0.3	0.12	1.01		
60-90	1	28	0.3	0.12	1.01		
90-120	1	28	0.3	0.12	1.01		
120-150	1	28	0.3	0.12	1.01		
150-180	1	28	0.3	0.12	1.01		
180-204	1	28	0.3	0.12	1.01		
			cum		19.58		

10 Providing and fixing 10cms thick pre cast RCC covering slab using reinforced cement concrete M20 mix with stone aggregate 20mm and down size including centring shuttering reinforcement and bar bending machine mixed concrete laid in

Atulya N.D
AEL(101)

Assistant Executive Engineer
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Assistant Executive Engineer
23/8

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